

## SECTION V ADJUSTMENTS

### 5-1. INTRODUCTION

5-2. This section describes adjustments that may be made to the 5004A. Only two adjustable functions exist. The power transformer primary is switchable to allow selection several different line voltages, and the data probe input threshold voltage is adjustable to allow the exactly correct value to be set. The 5004A top cover must be removed to change the power transformer primary (line voltage change). The data probe covers must be removed to set the threshold. Refer to disassembly procedures in Section VIII for cover removal information.

#### NOTE

The data probe threshold voltage should be checked when any parts are replaced in the data probe or when the power supply +5-volt regulator is replaced.

### 5-3. DATA PROBE THRESHOLD VOLTAGE CHECK AND ADJUSTMENT

5-4. Use the following procedure to check and adjust the data probe threshold voltage. Refer to the recommended test equipment listed in Section for units necessary in this procedure.

- Refer to the disassembly procedures in Section VIII, and remove the data probe covers.
- Refer to the parts location figure and schematic diagram in Section VIII for other information necessary for this procedure.

- Connect the negative test lead of the DVM to the Data Probe U2(1), and connect the positive test lead to U1(7). Record this voltage ( $V_{CC}$ ).
- Connect the positive test lead to U1(5). Compare this voltage with the  $V_{ref}$  voltage corresponding to the  $V_{CC}$  (step b) on Figure 5-1.
- If necessary, adjust potentiometer R4 so the  $V_{ref}$  voltage corresponds to  $V_{CC}$  voltage taken in step b.

#### NOTE

Figure 5-1 is a graph relating the U1 pin 5 voltage to U1 pin 7 voltage.

- Repeat steps b, c, and d.
- Disconnect the test equipment, and reassemble the data probe covers.

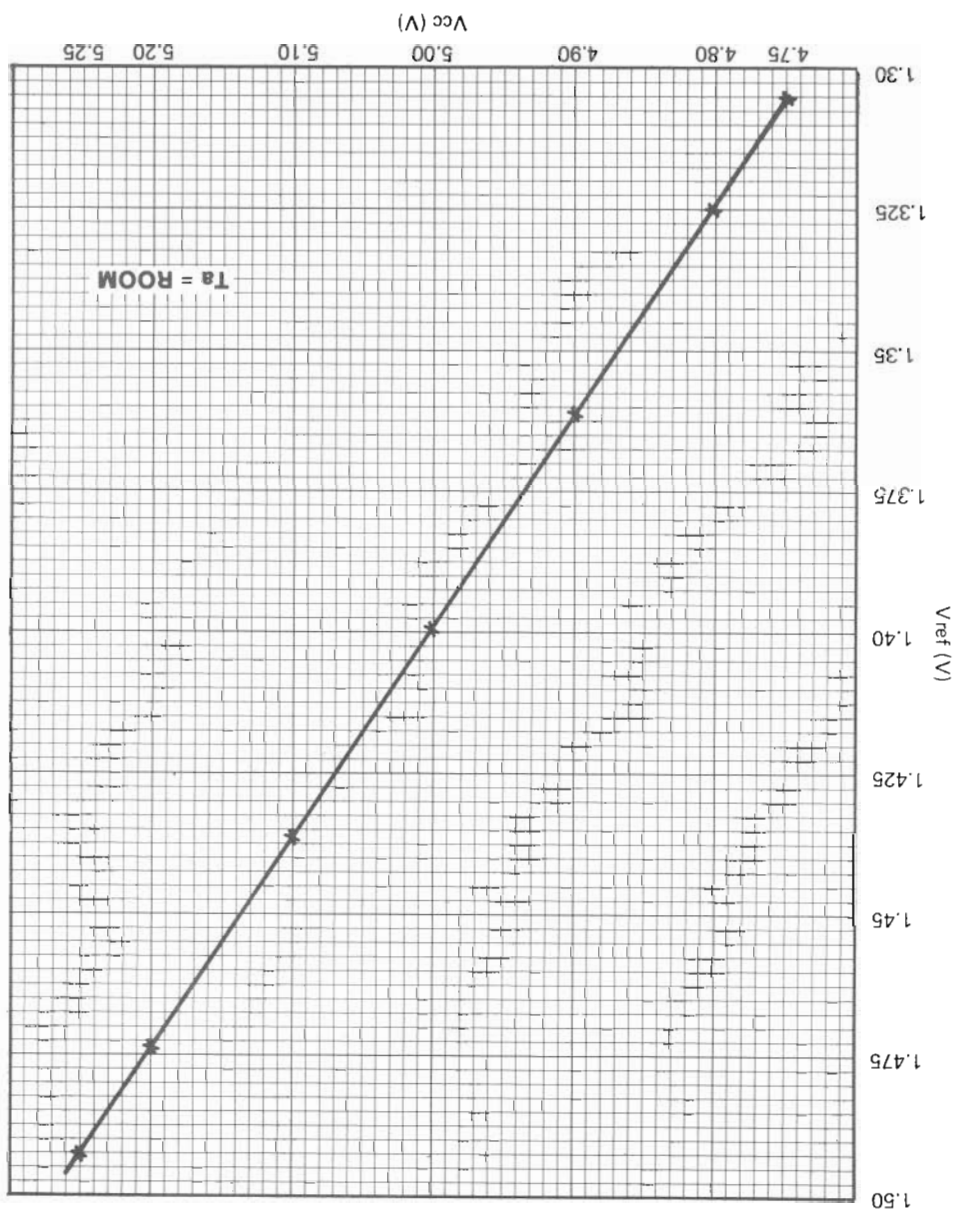
### 5-5. POWER TRANSFORMER PRIMARY LINE VOLTAGE CHANGE PROCEDURE

5-6. Use the following procedure to change the power transformer primary line voltage switches settings.

- Refer to the disassembly procedure in Section VIII, and remove the 5004A top cover.

#### WARNING

DISCONNECT THE LINE POWER CABLE FROM THE 5004A.

Figure 5-1. Data Probe  $V_{CC}$ — $V_{ref}$  Graph

- b. Refer to Figure 5-2 which shows the line fuse holder and the line voltage selection switches. Both switch indicators must be set to the line voltage selection marks to match the available line voltage.

**NOTE**

The possible line voltage range are listed in Section I, Specifications. Refer to this list to decide where the selection switches should be set.

- c. Set the line voltage switches to appropriate positions for the available line voltage.

**CAUTION**

Check the line fuse, F1. It must correspond to the line voltage selected. Refer to the specifications in Section VI for the correct value fuse.

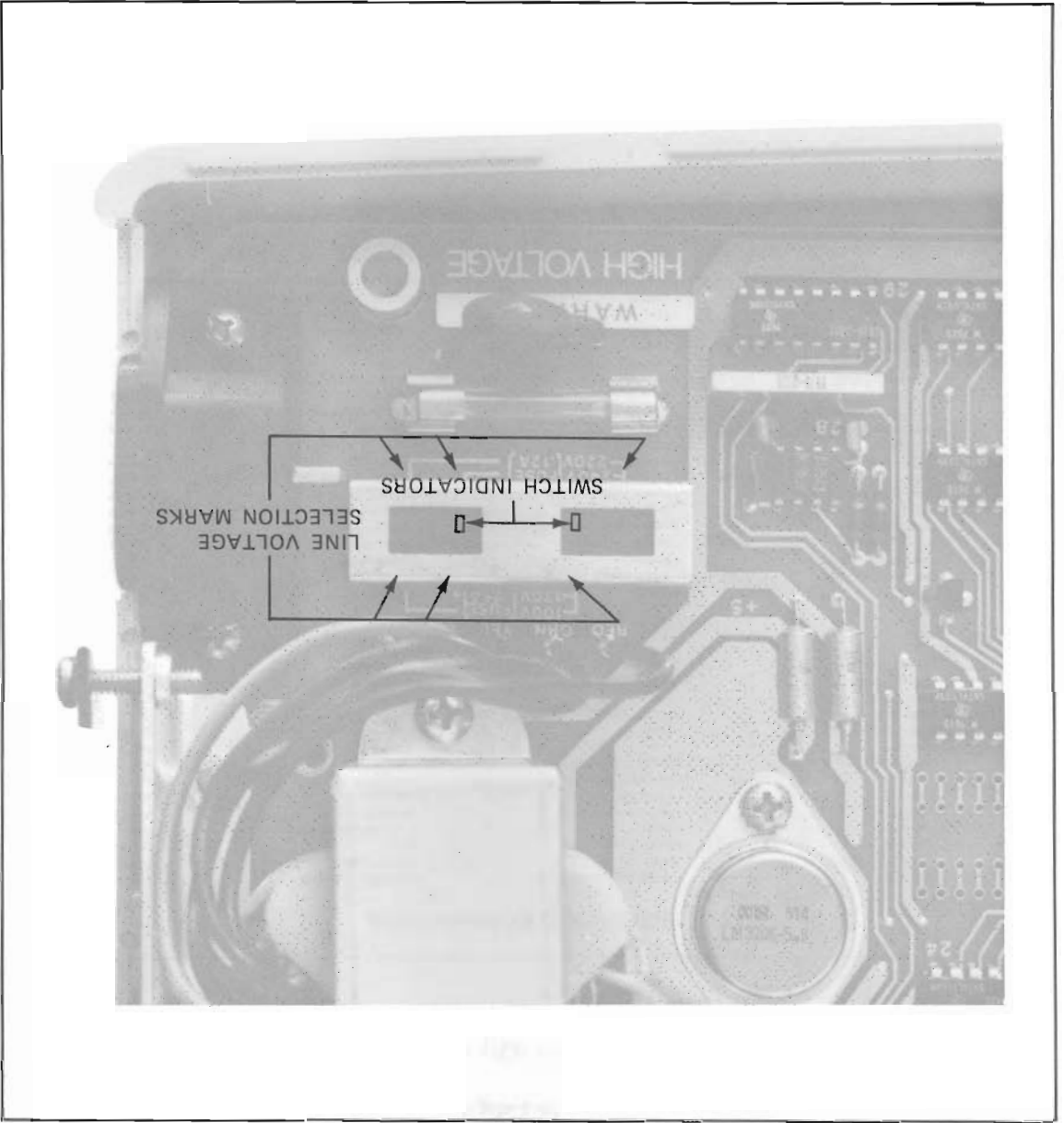


Figure 5-2. Fuse and Line Voltage Selection